Panelists Careers in Mathematics Conference, October 21, 2017

Kathryn Berkow: Kathryn currently teaches business analytics to undergraduates at the University of Delaware. In former roles at Morgan Stanley and ITG, she studied the microstructure of global equities markets to inform product development and suggest behavior changes to clients. Kathryn's focus was on large institutional clients who struggle with how to trade their orders because of their large size. At ITG, Kathryn used statistical models to contribute to algorithm design and studied client usage patterns and performance to make suggestions for improvement. Later at Morgan Stanley, Kathryn used statistical modeling to study market microstructure conditions including changes in liquidity and the effects of high frequency trading using market data and client order data. She met with clients to discuss market conditions as they applied to individual client goals and worked with trading desks to identify strategic trading opportunities.

Carrie Caswell: After graduating as a math major from DeSales University, and later from Villanova University with a Master's in Applied Statistics, Carrie put her learned skills to use working as a statistician at a contract research organization (CRO). Statisticians at CROs provide support for many aspects of clinical trials, from study design to statistical analysis. Concurrently, she worked as a graduate assistant at Villanova and a part-time lecturer at DeSales. In 2015, Carrie entered the University of Pennsylvania's PhD program in Biostatistics. At Penn, she collaborates with researchers on a variety of projects, with a concentration in the study of neurodegenerative diseases. Her dissertation work is focused on missing data methods and measurement error in biomarker research.

Stephen Cicioni: This is Stephen's forty-sixth year working as an educator. After thirty-seven years of working in both urban and suburban environments, he retired from classroom teaching. He has been teaching for the University of Pennsylvania in their Penn Literacy Network program for fifteen years. Presently, his consulting work involves providing professional development and classroom coaching support for teachers of grades K-12. During Stephen's classroom teaching career, he had the pleasure to work with over twenty student teachers. Each of those experiences provided him with many opportunities to reflect on his own teaching practices. He has presented at conferences at the local, state, and national levels. To quote Stephen: "I began my college experience using a slide rule and ended my classroom teaching career working with students for whom a TI – 84 graphing calculator was an everyday tool. What a wonderful, exciting journey I have had!"

Gregory Coxson: Greg is a radar engineer who enjoys encountering mathematical problems in his work. He is currently on the faculty of the Electrical and Computer Engineering department at the United States Naval Academy in Annapolis, Maryland. Previously, he was at several "radar houses", including Hughes Radar Systems, Lockheed Martin, Technology Service Corporation, and the Naval Research Lab. He has a long association with the Mathematical Association of America, having served as an officer in the MAA special interest group on Mathematics in Business, Industry and Government (BIG SIGMAA) and on the Board of Governors. He has graduate degrees in Mathematics and Electrical Engineering from the University of Wisconsin, and bachelor degrees in Mathematics and Physics from the University of Virginia.

Kayla Feairheller: Having just graduated this past May, Kayla is currently working her first full time position as a Software Engineer at a tech start up called Scoir, Inc. They are working with next generation technology to revolutionize the college decision and application process for high school students, counselors, and admissions officers alike. Their development team diligently works to uphold an agile environment with daily scrum meetings and biweekly planning sessions for upcoming features. Kayla's role on her team involves backend development; she is typically writing code in Go which is a relatively new asynchronous language that their platform is based in. In order to accomplish a quick turnaround on their feature work, the tasks that she completes involve the maintenance and manipulation of data in their Mongo database. Occasionally she works with Java code when they need to update their PDF generation

since that is contained in a separate app. Although this career path is based mostly off of a computer science background, Kayla expresses that "my Mathematics degree has proven quite useful and I am looking forward to sharing with the folks at EPaDel just how much Math has impacted my professional experiences."

Michael Ferlez: Michael is an economist in the Research group at Moody's Analytics. Michael covers the economies of South Carolina, Croatia, and several U.S. metro areas. Michael also works on the U.S. macroeconomic forecast and prepares custom alternative macroeconomic scenarios for clients. Additionally, he contributes real-time commentary to Economy.com and writes about U.S. macro forecast risks. Before joining Moody's Analytics, Michael worked at ETrade Financial and Freddie Mac. He holds a master's degree in applied economics from Johns Hopkins University.

James H. Fife: James has a Ph.D. in mathematics from Yale University in algebraic topology. After teaching for 14 years he moved to ETS, first working in test development, then IT, and then, in 2004, moving to research. He now works in two main areas: issues related to the automated scoring of constructed-response questions; and issues related to K-12 mathematics education and cognition. James has done consulting work in automated scoring for the Smarter Balanced Assessment Consortium and for CITO, the Dutch equivalent of ETS.

Ann Kovacs: Ann's role as a Senior Supply Chain Project Specialist on the Inventory Management Team of Lutron focuses on the company's raw material inventory. She pulls and analyzes data, optimizes the location of raw material inventory, works with engineering to understand how changing components in the company's products will affect their inventory, updates system parameters to affect inventory, and supports the company's global facilities' data analysis needs. Ann's job uses both simple and complex mathematics, and she shares that "The data collection, organization, presentation, and analysis skills I learned in Statistics are used daily in my job. Many supply chain roles also use mathematical skills – those roles being Forecasting, Finished Good Planning, Process Improvement, and many others."

Christopher Matthews: Chris is a health insurance actuary at Anthem, Inc., one of the largest health benefits companies in the United States. He is currently the actuarial lead for Individual and Small Group business at Anthem Blue Cross in California. His responsibilities include development of premium rates for benefit plans under the Affordable Care Act, projection of future premiums and claims, and managing a team of eight actuarial associates. He has 27 years of experience in the health actuarial field and is a Fellow of the Society of Actuaries. Prior to becoming an actuary, Chris was a college mathematics instructor for two years. He has an AB in mathematics from Occidental College and an MA in mathematics from the University of Wisconsin-Madison.

Jeff Newswanger: Jeff works for Shipment Trackers Inc., a small company in York, which is a leader in shipment tracking, auditing and invoice payment services. As Business Intelligence Manager, he is in charge of all the company's data which consists of clients invoices, auditing and payment processes. He is also in charge of all the company's reporting functions, which consist of internal/external standard reporting, dashboarding, and analytics. Jeff also heads special projects such as warehouse relocation, which seeks to minimize spending for the company's clients, and contract analysis, which uses means comparison and clustering statistics to identify where similar clients have better contracts in order to reduce costs further and get their clients the best pricing possible for their volume. Jeff's skills include: Data Mining, Data Warehouse, ETL (Extraction, Transformation, Load), MS BI suite (SSIS, SSRS, SSAS), TSQL, Tableau, UIPath, Predictive Analytics, Descriptive Statistic

Kevin Robinson: Kevin completed his undergraduate work in mathematics and statistics at Messiah College. He further pursued graduate work in statistics at the University of Florida. While a graduate assistant, he developed a passion for the challenge of statistical education at the general education and advanced levels. After graduate school, Kevin was part of the Department of Statistics at The University

of Akron, where he was instrumental in the development of two courses: Statistics for Everyday Life and Probability and Statistics for Engineers. Kevin joined the Department of Mathematics at Millersville University in the Fall of 2007. Besides statistical education, he has interests in industrial applications of statistics including response surface methodology and quality control. Kevin's other interests/hobbies include freshwater aquariums, fantasy sports, reading and parenting two sons.

Margo Sassaman: Margo Sassaman, Associate Director of Career Management for Experiential Learning and Career Management (ELCM), is responsible in assisting students and alumni identify their career/major paths. Margo uses various assessments, web based resources, LinkedIn and alumni networks to help students clarify their career paths. Once the student has identified their career interests, Margo helps the student develop a personal brand, both written and oral communication; develop strategies to connect with potential employers for both internships and employment after graduation; and assist with the graduate schools application process. Margo has her Ed.S. in Higher Education from The George Washington University, M.S. in Counseling Student Personal from Shippensburg University, and a B.S. in Equestrian Students from Salem University. She has over 30 years of experience in Career Services in Higher Education.

Rachel Tadlock: Rachel has been an elementary teacher for 12 years at Wickersham Elementary School in the School District of Lancaster. She has taught 3rd grade for 3 years. She previously taught 4th and 5th grade. She earned her BS in Elementary Education from Millersville University and an MS from Wilkes University. She helps to organize a local Math Fair for 2nd through 5th graders every fall where they play math games for an evening in the gym.

Stephanie M. Thomas: Stephanie Thomas started her career at the National Security Agency (NSA) as an Applied Research Mathematician in 2012. She spent three years in the Applied Mathematics Program, where she toured in various offices doing network optimization, image processing, cryptanalysis, language modeling, and hardware reverse engineering. She is currently a team lead in the High Performance Computing Applications branch where she applies her mathematical knowledge to find solutions to real-life mission problems. She is also an officer for WiMS (Women in Mathematics Society), an NSA organization aimed at enhancing the recruitment and retention of women in mathematics. Stephanie has a Bachelor's degree in Mathematics from McKendree University and a Master's degree in Mathematics Research from Saint Louis University.

Christina Weaver: Dr. Christina Weaver is an Associate Professor of Mathematics & Computer Science at Franklin & Marshall College (Lancaster, PA), where she shares her passion for mathematics, computer science, and her research with undergraduates. Dr. Weaver is an applied mathematician who simulates neurons to understand why their structure and function change with aging and disease. She collaborates closely with biologists at Mount Sinai School of Medicine (New York, NY) and Boston University School of Medicine (Boston, MA). She earned her B.S. in Mathematics from Mount St. Mary's University (MD) in 1998, and her Ph.D. in Applied Mathematics and Statistics from Stony Brook University (NY) in 2003. She was a postdoctoral researcher and Instructor of Biomathematics and Neuroscience at Mount Sinai, and joined F&M in 2009.